

AMENDMENT UNDER 37 C.F.R. § 1.111
Appln. No. 10/631,894
Docket No. Q76385

REMARKS

Claims 1-23 are all the claims pending in the application. Claims 1, 11, 15, and 17 are independent claims.

Formal Matters

Claims 1-24 are all of the pending claims. Claims 1, 11, 15, and 17 are independent claims. New dependent claim 24 has been added.

As an initial matter, the Examiner has acknowledged the claim for foreign priority and confirmed receipt of the priority document. In addition, the Examiner has considered the reference submitted with the Information Disclosure Statement filed on November 5, 2003, as indicated by the Examiner's initials next to the reference number listed on the PTO/SB/08 form.

Objections

The Examiner has objected to the drawings, specification, and claims. Applicants have addresses each of these objections below and respectfully requests that the Examiner withdraw these objections.

Drawings

The Examiner has indicated that Fig. 14 should be labeled as --Prior Art--. Accordingly, Applicant has labeled Fig. 14 as --Prior Art--.

The Examiner has indicated that the chemical formula "CH₃OOH" in Figs. 3, 5, and 6 is incorrect. In response, Applicant has amended Fig. 3 to refer to instead include the chemical formula of methane, --CH₃OH--. Applicant respectfully submits that no new matter has been

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added by this amendment at least because the specification specifically discusses methanol fuel cells.

The Examiner has indicated that the reference numeral "85" has been used to designate two different features. Accordingly, Applicant has amended Figs. 5 and 11 so that they refer to the opening portion of the bag as reference numeral --87--, instead of "85".

The Examiner has indicated that reference numerals 14, 88, 89, and 110, which are shown in the drawings, are not mentioned in the specification. The specification refers to reference numeral 14 at page 19 and reference numerals 88 and 89 at page 24. Applicant has amended several paragraphs of the specification so that it to properly refers to reference numeral 110.

The Examiner has indicated that reference numerals 87 and 100, which are described in the specification, are not shown in the drawings. Reference numeral 100 is shown in Fig. 14. Moreover, as discussed above, Applicant has amended Fig. 11 to refer to reference numeral 87.

Specification

The Examiner has objected to the specification for several reasons.

The Examiner has objected to the use of the words "constantly" and "continually" together. Applicant has deleted the word "constantly".

The Examiner has objected to the chemical formula "CH₃COOH." Applicants have amended the specification to refer to --CH₃OH--, i.e., methane.

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The Examiner has indicated that the second and third full paragraphs of page 7 are repeated starting at the bottom of page 7. In response, Applicants have deleted the second and third full paragraphs of page 7.

The Examiner has indicated that although the text refers to “a digital camera C from above”, there is no mention of a digital camera designated in the previous description. However, Applicant submits that “from above” does not refer to the reference name “digital camera C”, but instead refers to the direction from which the fuel pack 10 is provided in the digital camera C. Although we believe that the specification is clear, Applicant has moved the prepositional phrase “from above” to a position before “digital camera C” in an attempt to use language that would be preferred by this Examiner.

The Examiner has objected to a few additional typographical errors. Applicants have corrected these errors.

Finally, the Examiner has requested that Applicants capitalize the trademark “Teflon”. Although Teflon is already capitalized, Applicants have amended TEFLON so that each letter of the trademark is capitalized, as indicated at MPEP § 608.01(v).

Claims

The Examiner has objected to claims 3 and 18, alleging that these claims do not further limit claims 2 and 17. Specifically, the Examiner alleges that the functional phrase “filled into” does not limit these claims.

In response, Applicants have amended claims 3 and 18 to recite that the antifreezing agent is filled within the discharged-solution storing section. These claims have a different

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scope from claims 2 and 17 at least because they do not apply to situations in which the antifreezing agent is merely applied to coat the discharged-solution storing section.

Claim Rejections Under 35 U.S.C. § 112

Claim 23 is rejected under 35 U.S.C. § 112, first paragraph, as allegedly including subject matter that not described in the specification in such a way as to enable one of ordinary skill to make and/or use the invention.

Specifically, the Examiner has indicated that the specification does not define what is meant by a “portable terminal.” Therefore, the Examiner has looked to a dictionary to find the ordinary meaning of the phrase “portable terminal.” The Examiner has indicated that the term terminal means a “device, often equipped with a keyboard and a video display, through which data or information can enter or leave a computer system.” This interpretation of the phrase “portable terminal” is acceptable.

In addition, Applicant respectfully submits that one of ordinary skill would have known how to make and/or use the invention and would know what is meant by portable terminal since this phrase is not used in any unusual way in the specification. In fact, *non-limiting* examples of “other portable devices and portable terminals” are referred to in the specification at the second full paragraph of page 29 as “analog cameras, notebook personal computers and portable telephones.” As such, Applicant respectfully requests that the Examiner withdraw this rejection.

Claim 1 is rejected under 35 U.S.C. § 112, second paragraph, as being allegedly indefinite due to a minor informality. In response, Applicant has amended the claim in the

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manner suggested by the Examiner, and respectfully requests that the Examiner withdraw this rejection.

Claim Rejections Under 35 U.S.C. § 103

Claims 11-13, 15, and 16 are rejected under 35 U.S.C. § 102(e) as being allegedly anticipated by Prasad et al. (US 2003/0082427). Claims 1-10, 14, and 17-20 are rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over Prasad in view of Yamamoto (US 4,883,724). Claims 14 and 17-20 are rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over Prasad. Claims 21-23 are rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over Prasad and Yamamoto as applied to claim 1, and further in view of Lawrence et al. (US 2002/0197522).

Independent Claim 1

With respect to independent claim 1, Applicant has amended the claim to recite that a single flexible sheet member is deformable and is fixed to an inner surface of the fuel pack, and separates and seals the fuel storing section and the discharged-solution storing section from each other. This amendment is fully supported in the original specification at least by the *non-limiting* embodiment shown in, e.g., Fig. 4 and the discussion thereof.

Applicant respectfully requests that the Examiner withdraw the rejection of independent claim 1 at least because the combination of Prasad and Yamamoto does not reasonably teach or suggest the claimed fuel cell system having a single flexible sheet member is deformable and is fixed to an inner surface of the fuel pack.

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In contrast, Prasad merely discloses a portable electronic device 10 in which the separation is provided by a movable barrier 40 that includes both a first flexible inner container 24 and a second flexible inner container 44 (*See* Prasad at, e.g., Fig. 2) or by the entire flexible inner container 142 (*See* Prasad at, e.g., Fig. 11). Neither of these embodiments teaches or suggests a single flexible sheet member that is fixed to an inner surface of the fuel pack.

Accordingly, Applicant respectfully requests that the Examiner withdraw the rejection of independent claim 1.

Independent Claim 11

With respect to independent claim 11, Applicant respectfully traverses this rejection at least because Prasad does not teach all of the claim's recitations. For example, Prasad does not teach the claimed fuel pack having a flexible casing that houses the fuel bag body storing the fuel.

The Examiner's rejection is predicated on the assumption that Prasad's outer container 22 is a "flexible casing." However, there is no teaching or suggestion that the outer container 22 is flexible. In fact, it appears that Prasad's outer container 22 is rigid.

The fact that the claimed invention includes a flexible casing allows the fuel to be sent through the fuel supply port merely by applying a pressure to the casing. Moreover, by first applying a pressure to the casing, and then releasing the pressure from the casing, the water generated by the fuel cell can be sucked through the discharge solution recovery port. *See* Application at p. 24 & Fig. 5.

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Accordingly, Applicant respectfully requests that the Examiner withdraw the rejection of independent claim 11.

Independent Claim 15

With respect to independent claim 15, Applicant has amended the claim to recite that at least the discharged-solution storing section is replaceable. This amendment is fully supported in the original specification at least by the *non-limiting* embodiment shown in Figs. 9A-9D and the discussion thereof.

Applicant respectfully requests that the Examiner withdraw the rejection of independent claim 1 at least because Prasad does not reasonably teach or suggest the claimed fuel cell system having in which the discharged-solution storing section is replaceable.

Prasad does not teach or suggest this feature. In fact, it appears that the waste storage area 26, 126 is always provided within rigid outer container 22, 122, which does not have any way to be opened so that the waste storage area 26, 126 could be replaced. *See* Prasad at, e.g., Figs. 2 and 11.

Accordingly, Applicant respectfully requests that the Examiner withdraw the rejection of independent claim 15.

Independent Claim 17

With respect to independent claim 17, Applicant respectfully traverses this rejection at least because Prasad does not teach all of the claim's recitations. For example, Prasad does not teach the claimed fuel pack in which the discharged-solution storing means is provided with an

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antifreezing unit. Because the discharged solution is commonly water, the antifreezing unit prevents the discharged solution from being frozen in cold districts.

The Examiner's rejection is predicated on the assumption that it would have been obvious to modify Prasad's fuel supply so that the waste storage area 26 includes an antifreezing agent. Specifically, the Examiner alleges that because it is common in many arts to use antifreezing agents, that it would have been obvious to modify a portable electronic device, such as Prasad's waste storage area 26, to include an antifreezing agent.

Applicant respectfully submits that this rejection is deficient at least because the Examiner has not provided any *objective evidence* that it is common to use antifreezing agents with a fuel cell device. In fact, the rejection is based on the *unsupported* statement that it is common in many arts to use antifreezing agents. However, the use of an antifreezing agent in, for example, a car's engine, would not lead one of ordinary skill to modify a fuel cell waste storage device to include an antifreezing agent.

Accordingly, Applicant respectfully requests that the Examiner indicate some objective evidence that it would be obvious to use antifreezing agents with *a fuel cell device*. Applicant believes that this feature may be novel at least because none of the references cited by the Examiner discloses this feature¹.

Accordingly, we propose requesting that the Examiner withdraw the rejection of independent claim 17.

¹ See MPEP §2144.03 for a discussion of reliance on common knowledge in the art.

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Dependent Claims

With respect to dependent claims 2-6 and 14 (which include the recitation that the discharged-solution storing section is provided with an antifreezing agent), Applicant respectfully requests that the Examiner withdraw the rejection at least because of their dependency from claims 1 and 11, and also for the reasons discussed above with respect to independent claim 17.

With respect to dependent claim 9 (which includes the recitation of a flexible casing"), Applicant respectfully requests that the Examiner withdraw the rejection at least because of its dependency from claim 1 for the reasons discussed above with respect to independent claim 11.

With respect to dependent claim 10 (which includes the recitation of a heating mechanism), Applicant respectfully requests that the Examiner withdraw the rejection at least because of its dependency from claim 1 and because the Examiner has not provided any objective evidence that it is common to use a heater with a fuel cell device. Moreover, the general concept of a heater would not lead one of ordinary skill to modify a fuel cell waste storage device to include a heater. Accordingly, Applicant respectfully requests that the Examiner indicate some objective evidence that it would be obvious to use a heater with a fuel cell device.

With respect to dependent claims 7, 8, and 21-23, Applicant respectfully requests that the Examiner withdraw the rejection at least because of their dependency from claim 1. With respect to dependent claims 12-14, Applicant respectfully requests that the Examiner withdraw the rejection at least because of their dependency from claim 11. With respect to dependent

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claims 16, Applicant respectfully requests that the Examiner withdraw the rejection at least because of its dependency from claim 15. With respect to dependent claims 18-20, Applicant respectfully requests that the Examiner withdraw the rejection at least because of their dependency from claim 17.

New Claim

Applicant has also added new dependent claim 24, which depends from claim 1. This new claim is fully supported in the original specification at least by the *non-limiting* embodiment shown in Fig. 4, and the discussion thereof.

Applicant respectfully submits that this claim is patentable at least because of its dependency from claim 1.

Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

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The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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AMENDMENTS TO THE DRAWINGS

In Figs. 3, 5, and 6, the chemical formula “CH₃OOH” has been changed to --CH₃OH--.

In Figs. 5 and 11, one occurrence of the reference numeral “85” has been changed to --87--.

In Fig. 14, the label --Prior Art-- has been added.

Attachment: Five (5) Replacement Sheet(s)